ACC NR: AP7001579 (A) SOURCE CODE: UR/0421/66/000/006/0117/0118

AUTHORS: Lunev, V. V. (Moscow); Pavlov, V. G. (Moscow)

ORG: none

TITLE: Modification of the explosion analogy for flow around slender blunt bodies

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 6, 1966, 117-118

TOPIC TAGS: hypersonic flow, explosion, flow characteristics

ABSTRACT: The analogy of hypersonic flow around blunt flat and axisymmetric bodies to the transient motion during an explosion (H. K. Cheng and A. Pallone. Inviscid leading edge effect in hypersonic flow. J. Aeronaut. Sci. 1956, No. 7) leads to a substantial error when applied directly. This is proven by comparing the exact solution and the explosion analogy solution for the shock wave shape and pressure distribution of flow around a slender cylinder with a spherical nose. It is shown that this error can be substantially reduced by including the contribution of the blunt nose section to the radial impulse imparted to the gas by the body. This inclusion is neglected in direct application of the analogy. To correct this condition, the center of the explosion is placed at a distance x_0 in front of the origin of the coordinates. This procedure is demonstrated for a hemispherical nose, for which the distance x_0 is derived as $2.4\ r_0$. Orig. art. has: 1 figure and 3 formulas.

SUB CODE: 20/ SUBM DATE: 06Jul65/ ORIG REF: 006/ OTH REF: 001

Card 1/1 19/

ACC NR: AP7006798 SOURCE CODE: UR/0418/66/000/006/0058/0060

AUTHOR: Shul'te, Yu. A. (Doctor of technical sciences); Lunev, V. V. (Engineer); Grechanyy, A. P. (Engineer)

ORG: None

TITLE: Increasing resistance to cold shortness in alloy steels used for castings

SOURCE: Tekhnologiya i organizatsiya proizvodstva, no. 6, 1966, 58-60

TOPIC TAGS: alloy steel, impact strength, plastic strength, cast steel, FERRITE STEEL, PEARLITE STEEL

ABSTRACT: The authors consider the effect of complex reduction on the mechanical properties and resistance to cold shortness of alloyed ferrite-pearlite steels. The grades of steel studied were 25ML with the composition (in %) 0.23-0.28 C, 0.55-0.75 Mn, 0.2-0.3 Si, 0.024-0.634 S, 0.027-0.030 P, 0.4-0.55 Mo and 0.027-0.040 Al, and 30KhMML with the composition (in %) 0.28-0.35 C, 0.52-0.68 Mn, 0.23-0.27 Si, 0.032-0.040 S, 0.33-0.38 P, 1.42-1.56 Cr, 1.30-1.50 Ni, 0.25-0.35 Mo and 0.030-0.035 Al. The effect of calcium and cerium additives on the mechanical properties and cold shortness of these grades of steel was studied. Aluminimum alone, aluminim combined with silicon-calcium alloy and a combination of silicon-calcium alloy, aluminum and ferrocerium were used as reducing agents. It was found that complex reduction increases strength and ductility with a simultaneous reduction in the critical tempera-

UDC: 669.15:620.192.42.004.68

Card 1/2

ACC NR: AP7006798

ture of embrittlement. The effect of calcium modification alone approaches that of triple modification by aluminum, calcium and cerium. All specimens showed a smooth reduction in impact strength from +20 to -100°C without the jumps characteristic of steel with pronounced cold shortness thresholds. The yield stress of 25ML steel falls with a temperature reduction until it reaches the value of the tensile strength at -196°C. Due to the favorable effect of nickel, 30KhNML steel retains a fair amount of ductility even at this temperature. The experimental data show that the resistance of ferrite-pearlite alloy steels to cold shortness may be considerably increased with a concomitant improvement in the purity of the metal. Orig. art. has: 4 figures, 1 table.

SUB CODE: 11/ SUBM DATE: None/ ORIG REF: 004

Card 2/2

LUNEV, V.Ye.

Copper conversion in a lead smelting plant. TSvet.met.29 no.9:48-50 S '56. (MLRA 9:10)

1.Ust'-Kamenogorskiy kombinat.
(Ust'-Kamenogorsk--Lead--Metallurgy) (Copper--Metallurgy)

LUNEV, V. YE.

AUTHOR: Lunev, V.Ye and Chuprikov, V.I. 136-2-6/22

TITLE: Fluidised Roasting Practice at the Ust'-Kamenogorsk Combine. (Praktika obzhiga v kipyashchem sloye na Ust'-kamenogorskom Kombinate)

PERIODICAL: Tsvetnyye Metally, 1957, No.2, pp. 32 - 36 (USSR)

ABSTRACT: At the Ust'-Kamenogorskiy Combine, as at many other zinc works, multiple-hearth furnaces are being replaced by fluidised roasters. In this paper, details are given of the fluidised practice together with comparative data on the previous practice. The fluidised roasters have been made by removing the mechanisms from inside existing multiple hearth furnaces, the shell and lining being left unchanged. A general view of the roaster and of one of the nozzles are illustrated. The process was sensitive to operating conditions and the gas renewal system was defective (an editorial note here refers the authors to Giprotsvetnet designs and the latest album of fluid bed furnaces). On the whole, however, the fluidised roasters came up to expectations, as shown by a tabulation of comparative performance data. Thus, the daily productivity of the fluidised roaster in tons of concentrate was 120 (that of the multiple hearth furnace being 45), its specific productivity in tons per m^3 of volume was 0.34 (0.12) the sulphide-sulphur

1/2

SMIRNOV, V.M.; SIMAKOV, K.M.; ABDEYEV, M.A.; KHAN, O.A.; LUNEV, V.Ye.

Metallurgy in the Altai during the 40 years of Soviet government.
Trudy Alt. GMNII AN Kazakh. SSR no.7:15-28 '58.
(MIRA 12:7)
(Altai Territory--Nonferrous metals--Metallurgy)

ALIFBAYEV, A.A.; LUNEV, V.Ye.

Some unsolved problems in the technology of metallurgical enterprises of the Rudnyy Altai. TSvet. met. 37 no.11:9-14 N '64. (MIRA 18:4)

LUNEV, V. Ye.

Efficient cooperation between ore dressing plants and metallurgy. Trudy Alt. GMNII AN Kazakh.SSR 9:16-28 '60. (MIRA 14:6)

1. Vostochno-Kazakhstanskiy sovnarkhoz.
(Ore dressing)
(Nonferrous metals--Metallurgy)

LUNEV, Viktor Yevgen'yevich [deceased]; GUDIMA, N.V., dots., retsenzent

[Get acquainted with copper] Poznakom'tes' s med'iu. Moskva, Metallurgiia, 1965. 83 p. (MIRA 18:11)

LUNEV, Ye., inzhener-podpolkovnik; SOLOV'YEV, I., inzhener-podpolkovnik

Our helper is an explosion. Starsh. serzh. no.1:36-37 Ja '62. (MIRA 15:4)

(Demolition, Military)

SIPOVICH, S.Yu.; [illegible], Yu.I.

Electric pusher cars in the Dnepropetrovsk Coke and Coal Chemicals Plant. Koks i khim. no.10:55-57 '62. (MIRA 16:9)
(Dnepropetrovsk—Coking plants—Equipment and supplies)
(Railroads, Industrial—Cars)

LUNEVA, A., domokhozyayka; PLOTNIKOVA, A., lifter; YEGOROVA, N.; GANTSEV, M., slesar'-montazhnik; GORBUNOV, A.

In order to keep in a good mood. Zhil.-kom.khoz. 12 no.6:30-31 Je '62. (MIRA 15:12)

1. Zaveduyushchaya priyemnym punktom "Akademgorodka" (for Yegorova). 2. Vostoktekhmontazh (for Gantsev). 3. Direktor bani i prachechnoy No.3 g. Novosibirsk (for Gorbunov).
(Novosibirsk—Baths, Public)
(Novosibirsk—Laundries, Public)

LUNEVA, A. S. Cand Med Sci -- (diss) "Effect ~~The influence~~ of ~~the~~ Hypophysis on certain biophysical Properties ~~characteristics~~ of striated muscles." Mos, 1957. 11 pp 20 cm. (Acad Med Sci USSR. Inst of Normal and Pathological Physiology). 210 copies.
(KL, 23-57, 117)

LUNEVA, A.S.

State of the blood serum protein fractions in acute and chronic suppurative otitis. Trudy gos. nauch.-issl. inst. ukha, gorla i nosa no.11:207-211 '59. (MIRA 15:6)

1. Iz Biokhimicheskoy laboratorii Gosudarstvennogo nauchno-issledovatel'skogo instituta ukha, gorla i nosa.
(BLOOD PROTEINS) (EAR--DISEASES)

MALOMUZH, F.F.; KOSACHEVA, A.P.; LUNEVA, A.S.; AMIROV, R.Z.; BUREVA, V.B.; MARKOVA, V.I.; FEDOROVA, V.A.

Pathogenesis of acute and chronic otitis in children. Trudy gos. nauch.-issl. inst. ukha, gorla i nosa no.11:199-206 '59. (MIRA 15:6)

1. Iz klinicheskogo otdeleniya detskogo vozrasta Gosudarstvennogo nauchno-issledovatel'skogo instituta ukha, gorla i nosa.
(EAR--DISEASES)

LUNEVA, K.A.

Name: LUNEVA, K. A.

Dissertation: Clinical aspects and morphology of polyps of the cervix uteri

Degree: Cand Med Sci

Affiliation: Erivan State Medical Inst

Defense Date, Place: 1955, Erivan

Source: Knizhnaya Letopis', No 51, 1956

Referred at Publication

BRUDNA, Ye.I., kand.med.nauk; LUNEVA, K.K. [Lunieva, K.K.]

Etiology of toxicoseptic diseases among newborn in maternity homes. Ped., akush. i gin. 19 no.15-16 '57. (MIRA 13:1)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya gigiyeny i epidemiologii Ministerstva putey soobshcheniya.
(INFANTS (NEWBORN)--DISEASES)

NIKITIN, P.I.; LUNEVA, K.K.; FOMICHEVA, N.I.

Disinfection of surfaces with small doses of disinfectants applied by means of pneumatic atomizers. Zhur.mikrobiol., epid. i immun. 33 no.8:30-34 Ag '62. (MIRA 15:10)

1. Iz Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnoy gigiyeny Ministerstva putey soobshcheniya.
(DISINFECTION AND DISINFECTANTS) (AEROSOLS)

NIKITIN, P.I.; PAKHOMOVA, V.V.; LUR'EVA, K.K.

Disinfection and disinfestation of bedding made from synthetic materials. Zh. mikrobiol. 40 no.7:13-18 Jl'63 (MIRA 17:1)

1. Iz Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnoy gigiyeny Glavnogo sanitarnogo upravleniya Ministerstva putey soobshcheniya.

USSR / Human and Animal Morphology (Normal and Pathological). S
Nervous System. Peripheral Nervous System.

Abs Jour : Ref Zhur - Biologiya, No 9, 1958, No. 40811

Author : Luneva, L. A.
Inst : Kursk Medical Institute
Title : The Intratrunkal Structure of the Sural, Superficial Perineal and Internal Cutaneous Nerves of the Shin

Orig Pub : Sb. tr. Kurskiy med. in-t, 1956, vyp 11, 80-90

Abstract : Sections of large nerves were freed of membranes on glass and split into individual fibers which were stained by the method of Vorob'iev. A few types of myelinic and amyelinic nerve fibers were demonstrated. Occasionally their pathological changes were noted.

Card 1/1

LUNEVA, L. A., Cand Med Sci -- (diss) "Nerves of the ribs and the breastbone." Kursk, 1960. 20 pp; (Ministry of Public Health RSFSR, Voronezh State Medical Inst); 200 copies; price not given; (KL, 30-60, 140)

L 24224-66 EWT(m)/T GS/GW

ACC NR: AT6008851 SOURCE CODE: UR/0000/65/000/000/0120/0130

45
B

AUTHOR: Lunev, Z. M.; Romanov, A. A.

ORG: none

TITLE: Adsorption capacity of zeolites at pressures from $1 \cdot 10^{-3}$ to $1 \cdot 10^{4}$ N/m^2 and liquid nitrogen temperature

SOURCE: AN UkrSSR. Magnitnyye lovushki (Magnetic traps). Kiev, Naukova dumka, 1965, 120-130

TOPIC TAGS: zeolite, low temperature effect, gas adsorption, ion exchange, molecular sieve

ABSTRACT: Internal diffusion is the decisive stage in the kinetics of hydrogen, nitrogen and argon adsorption on granulated synthetic zeolites arranged in a thin layer and cooled to the temperature of liquid nitrogen. The process of filling the adsorption space to equilibrium values at constant concentration takes place over a protracted period of time with low adsorption rates. A study of the exchange of a sodium ion for cations of calcium and magnesium showed that MgNaA and CaNaA zeolites give the most complete degree of sodium ion exchange for magnesium or calcium cations in static vacuum systems. These zeolites give low pressures for carrying out experiments in clean conditions. By varying the degree of sodium ion exchange for other cations, the

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Card 1/2

L 24224-66

ACC NR: AT6008651

molecular sieve properties of the zeolites may be controlled within wide limits at low temperatures. In view of the low adsorption rates at low temperatures, the use of zeolites in dynamic vacuum systems is not very effective. Orig. art. has: 4 figures, 1 table.

SUB CODE: 20/ SUBM DATE: 20Oct65/ ORIG REF: 006/ OTH REF: 000

Card 2/2 BLG

AUTHORS: Sladkov, A.M., Luneva, L.K. SOV/63-3-6-38/43

TITLE: The Production of Primary Camphenyl Alcohol (Polucheniye pervichnogo kamfenilovogo spirta)

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1958, Vol III, Nr 6, pp 835-836 (USSR)

ABSTRACT: From technical camphene the pure substance was separated by freezing and distillation. In reaction (1) 330 g of camphene were transformed to 100 g of n-octane. After oxidation and hydrolysis 115 g of camphenyl alcohol were obtained with a boiling temperature of 126°C at 25 mm. From the alcohol the acid phthalate and n-nitrobenzoate were also produced. There is 1 diagram and 7 references, 4 of which are Soviet, 2 German, and 1 English.

ASSOCIATION: Nauchno-issledovatel'skiy institut sinteticheskikh spirtov i organicheskikh produktov (Scientific Research Institute of Synthetic Alcohols and Organic Products)

SUBMITTED: April 25, 1958

Card 1/1

AUTHORS: Sladkov, A. M., Lu.eva , L. K. SOV/79-28-10-58/60

TITLE: Synthesis of Hydratro. .lcohol (Polucheniye gidratropovogo spirta)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 10, pp 2894 - 2898 (USSR)

ABSTRACT: 2-Phenyl propanol, or hydratropalcohol, is a synthetic aromatic substance of great interest, especially as a basis for modern perfume compositions (Ref 1). Its synthesis has so far not been published, although it can be assumed that it is already being carried out by means of a reduction of hydratropaldehyde. Some years ago, Ziegler (Tsigler) and collaborators (Ref 6) achieved the synthesis of the primary alcohols by means of an oxidation of the aluminium trialkyls followed by hydrolysis of the resulting aluminium alcoholates (Refs 6,7). The application of this reaction to the synthesis of the above alcohol (I) on pattern 1 suggested itself to the authors, as it promised good yields and a technically simple operation, and as basic α-methyl styrol served as an

Card 1/3

initial product. Ziegler points to the possibility of conducting the reaction at one or two development stages, which induced the authors to test this possibility in their particular case. It was shown that in a one-stage reaction the yield of the above alcohol was lower than that of the corresponding dimer of α-methyl styrol. Besides this styrol, isopropyl benzene was always formed as a by-product. It can be assumed that the dimer of α-methyl styrol corresponds to the formula (II), and differs from the dimer (III) synthesized by **Schtaudinger** (Shtaudinger) (Ref 9). In addition to the compounds obtained in the reaction, a small quantity of 2-phenyl heptene-1 could be detected (Pattern 2). There are 13 references, 2 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut sinteticheskikh spirtov i organicheskikh produktov (Scientific Research Institute of Synthetic Alcohols and Organic Products)

Synthesis of Hydratropalcohol

SOV/79-28-10-58/60

SUBMITTED: August 12, 1957

Card 3/3

20-119-6-29/56

AUTHORS: Sladkov, A. M., Markevich, V. A., Yavich, I. A., Luneva, L.K., Chernov, V. N.

TITLE: The Production of Some Primary Alcohols by Means of Organo-aluminum Compounds (Polucheniye nekotorykh pervichnykh spirtov cherez alyuminiyorganicheskiye soyedineniya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 119, Nr 6, pp.1159-1161 (USSR)

ABSTRACT: In connection with references in publications (Ref 1) concerning the possibility mentioned in the title the authors investigated a complex of reactions which render possible the conversion of α-olefins into primary alcohols according to the following schemes:

1) $R - CH = CH_2 + al + H \longrightarrow R - CH_2 - CH_2\,al$ (I)

2) $(I) + O_2 \longrightarrow CH_2CH_2 - O - al$ (II)

3) $(II) + H_2O \longrightarrow RCH_2CH_2OH + al(OH)$

where al = 1/3 Al.

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The Production of Some Primary Alcohols by Means of Organoaluminum Compounds

This reaction was performed by examples of 2-methylpentene-1 and 2-ethylhexene-1, which were produced by means of dimerization of propylene and n-butylene. The aluminum-trialkyls produced of these olefins, as well as trialkyl-aluminum synthesized by another method were oxydized into alcoholates by means of air, which then were hydrolyzed into the corresponding alcohols. By means of specially performed experiments with oxidation of tridecylaluminum at low temperature it was proved that the reaction passes a stage of forming a peroxide compound, which, according to a molecular regrouping, apparently is transformed into aluminum alcoholate. It has been proved that the production mentioned in the title is relatively simple and that it is possible in sufficiently good yields (60 - 65 %). Hydration products of olefins always are produced as secondary products. According to the finely disperse iron, which is present in the active aluminum and which plays the part of a specific catalyzer of the type of the skeleton metals of the eighth group of the periodic system of elements, hydration takes place. The iron content amounted to up to 12 - 15 %. The temperature necessary for the butenyl dimerization is by 100°C higher than in the case of propylene.

The Production of Some Primary Alcohols by Means of Organoaluminum Compounds

Preliminary analysis results of the waste gases after the dimerization showed that butene-2 practically does not enter reaction. Besides the 2-ethylhexene hexene-1 always (from butylene and triethylaluminum) and 2-methylpentene-1 forms (from the propylene contained in the technical butylene fraction). In spite of these secondary products the yield of butene-1 dimer is very high (90 % of that theoretically possible). Then follows an experimental part with usual data. There are 9 references, 2 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut sinteticheskikh spirtov i organicheskikh produktov
(Scientific Research Institute of Synthetic Alcohols and Organic Products)

PRESENTED: December 27, 1957, by B. A. Kazanskiy, Member, Academy of Sciences, USSR

SUBMITTED: December 24, 1957

Card 3/3

KORSHAK, V.V.; KRONGAUZ, Ye.S.; SLADKOV, A.M.; SHEINA, V.Ye.; LUNEVA, L.K.

Coordination chain polymers. Part 1: Preparation of polymers of bis-(β-diketones) and metals. Vysokom.soed. 1 no.12: 1764-1771 D '59. (MIRA 13:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Ketones) (Organometallic compounds) (Polymers)

TSANDER, M.; LUNEVA, L.K. [translator]

New data on polynuclear aromatiq hydrocarbons. Usp.khim. 30 no.10:1258-1271 O '61. (MIRA 14:9)
(Hydrocarbons) (Cyclic compounds)

S/062/62/000/004/012/013
B110/B101

11.1340

AUTHORS: Korshak, V. V., Sladkov, A. M., and Luneva, L. K.

TITLE: Synthesis of elemental organic polymers with acetylene bonds in their chain

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 4, 1962, 728

TEXT: New polymers were obtained by polycondensation of halides of elemental organic compounds, $RMeCl_2$, with Na acetylenides of bis-acetylenes in polar solvents (tetrahydrofuran, dimethyl ether, diethylene glycol, ethyl ether, etc.). The acetylenide was obtained from finely distributed sodium or sodium amide and bis-acetylene in the solvent. Elemental organic compounds in the same solvent were added at room temperature, heated to 60-100°C, filtered off, and the polymer was separated from the filtrate. Thus, the acetylenide was obtained from p-di-ethinyl benzene and sodium. After the addition of dimethyl dichloro silane, the substance was boiled for 7 hrs, cooled, and diluted with water. A light-yellow polymer not melting at

Card 1/2

300°C and slightly darkening at 240°C (C = 66.45, H = 7.74, Si = 20.92%) precipitated. The infrared spectra showed C≡C (2250 cm^{-1}) and Si-CH_3 stretching vibrations (1250 cm^{-1}). The range of elastic deformation was thermodynamically determined at 150-300°C. Similarly, an acetylenide was obtained from phenyl acetylene and sodium. Addition of dimethyl dichloro silane at room temperature and subsequent boiling for 4 hrs yielded di-p-phenyl ethinyl dimethyl silane (b. p. 180-185°C at 4 mm Hg). In an analogous manner, polymers can also be obtained from other compounds of elements of Group IV. The resulting monomers were used for producing polymers and copolymers.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental Organic Compounds of the Academy of Sciences USSR)

SUBMITTED: December 25, 1961

LUNEVA, L. K.

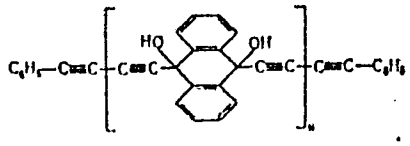
S/020/62/144/004/019/024
B101/B138

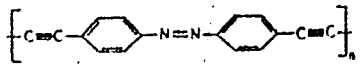
AUTHORS: Myl'nikov, V. S., Sladkov, A. M., Kudryavtsev, Yu. P., Luneva, L. K., Korshak, V. V., Corresponding Member AS USSR, and Terenin, A. N., Academician

TITLE: Photo-semiconductor properties of acetylene polymers

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 4, 1962, 840 - 843

TEXT: Data for the polyacetylenes I - VIII are reported from the laboratory directed by A. N. Terenin where research on photosensitive polymers has long been proceeding. The compounds were synthesized in the laboratory directed by V. V. Korshak. I, II and III were very photosensitive in


(I)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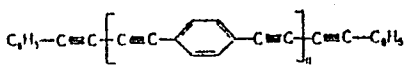
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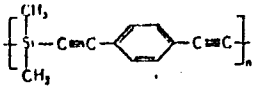
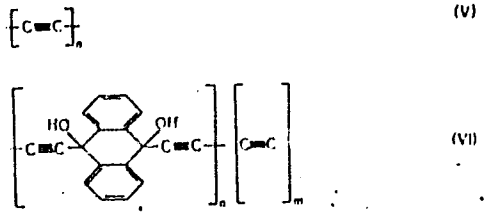

(IV)

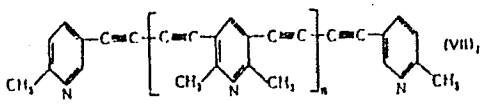
Card 1/3

Photo-semiconductor properties...

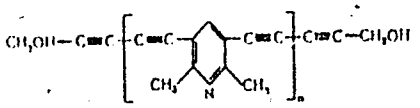


(V)

(VII)



(VIII),



(VIII)

modulated light (10 mv/mw at 300 cps). IV, V and VI were less photosensitive; VII and VIII showed no photo-emf. In I - IV the conductivity was of p type, in V and VI it was of n type. I and II were examined more closely. Results: (1) The spectral distribution of photo-emf showed a reduction in this effect at 200 → 600 mμ with a narrow selective peak of exciton type at λ = 480 mμ in the case of I and a wide peak in this range for II. (2) Preliminary illumination of II for 2 hr in ultraviolet light from an OBL-120 (SVD-120) mercury lamp increased its photo-emf by one order of magnitude. The long-wave threshold of activation is at 366 mμ and the 405 mμ line is inactive. (3) Preliminary illumination is more effective in vacuo than in air. The photo-emf of I increases during the first

3 - 5 min lighting, then slowly decreases, but after approx. 1 hr regains its initial value. After 1 - 2 hr storage in the dark this process is repeatable. (4) If II is activated by UV light in vacuo the admission of air immediately reduces its photo-emf to 1/2 - 1/3. This effect is also repeatable. These results are explained by the UV light ionizing the conjugated molecules so that positively charged local centers are formed which act as electron traps. The photoelectron is retained in the polymer structure according to E. C. Lim, G. W. Swenson (J. Chem. Phys., 36, no. 1, 118 (1962)). The absorption of light permits the origination of an exciton which migrates between the molecules and disintegrates on a defect produced by the UV light to form a mobile hole and an electron trapped by the defect. Accordingly it should be possible to synthesize photosensitive polymers. There are 3 figures.

SUBMITTED: April 20, 1962

Card 3/3

KORSHAK, V. V.; SLADKOV, A. M.; LUNEVA, L. K.

Elementoorganic polymers. Izv. AN SSSR Otd. khim. nauk no.12: 2251-2253 D '62. (MIRA 16:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

(Polymers) (Organometallic compounds)

KORSHAK, V.V.; SLADKOV, A.M.; LUNEVA, L.K.; GIRSHOVICH, A.S.

Synthesis and study of allylhydroxytitanocene-containing polymers. Vysokom.soed. 5 no.9:1284-1287 S '63. (MIRA 17:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

L 19444-63 EPF(c)/EWP(j)/EWT(m)/BDS ASD/ESD-3 Pc-4/Pr-4 RM/WW/MAY
ACCESSION NR: AP3006747 S/0190/63/005/009/1288/1291

AUTHOR: Korshak, V. V.; Sladkov, A. M.; Luneva, L. K.; Bulgakova, I. A.

TITLE: Study in the field of coordination polymers. 16. Synthesis of polymers based on orthotitanates and bis-(Beta-diketones)

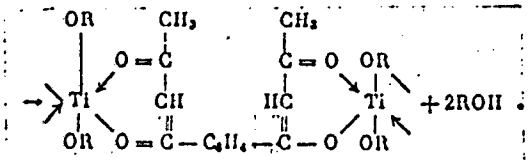
SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 5, no. 9, 1963, 1288-1291

TOPIC TAGS: polymers, coordination polymers, soluble coordination polymers, soluble coordination polymer synthesis, synthesis, acetoacetic acid. 2.2'-terephthaloyldi-. ethyl ester, copper acetate, acetic acid. copper salt, copper, nickel, cobalt, magnesium, mercury, 1.3-butanedione. 1-phenyldi-, 2-propanedione. 1-terephthaloyldi-, H_4TiO_4. alkyl ester, H_4TiO_4. tetraethyl ester, 2.4-pentanedione, 1.3-butanedione. 1-phenyl-, complex, H_4TiO_4. tetra-tert-butyl ester, hydrolysis, coordination polymer property, property

Card 1/4

L 19444-63
ACCESSION NR: AP3006747

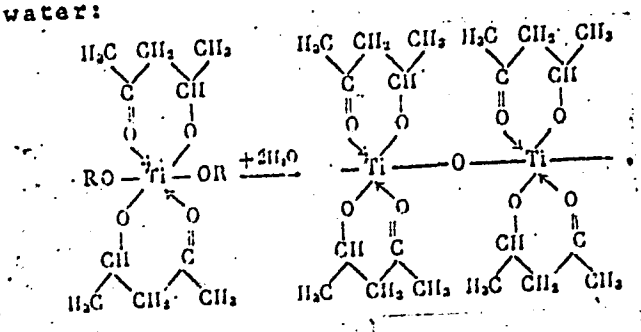
ABSTRACT: Soluble coordination polymers have been prepared by the following methods: 1) Use of addenda with polar substituents. Heating of a 5% alcohol solution of ethyl 2,2'-terephthaloyldiacetoacetate with an excess of a saturated alcohol solution of copper acetate yielded a coordination polymer in the form of a green precipitate. The polymer withstands heating to 200C, is readily soluble in diethylformamide, and is slightly soluble in alcohol, benzene, and acetic acid. Similar products were prepared using Ni, Co, Mg, and Hg. 2) Synthesis of complexes of diketones with metals having the coordination number 6. Heating of terephthaloyldiacetone with tetraethyl or tetra-tert-butyl orthotitanate in dry xylene, with stripping off of the theoretical amount of alcohol, yielded products fully soluble in xylene and having the general formula (as confirmed by elemental analysis),



2/4

L 19444-63
ACCESSION NR: AP3006747

By addition of petroleum ether, these products can be precipitated from xylene solution as a yellow fine crystalline substance partly soluble in benzene and dimethylformamide. The molecular weight of the product prepared with tert-butyl titanate was determined by the cryoscopic method to be 800, corresponding to that of the dimer. 3) Synthesis of acetylacetonate or benzoylacetonate complexes with tetra-tert-butyl titanate and their hydrolysis with the theoretical amount of water:



Card 3/4

L 19444-63
ACCESSION NR: AP3006747

The acetylacetonate complex yielded a polymer with molecular weight 12,000 which melts at about 120C and is hydrolyzed in air to form a brittle insoluble product. The benzoylacetonate complex yielded a polymer with molecular weight 900 which is soluble in methyl alcohol, benzene, acetone, and dimethylformamide. Orig. art. has: 4 formulas.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Organoelemental Compounds, AN SSSR)

SUBMITTED: 23Dec61 DATE ACQ: 30Sep63 ENCL: 00

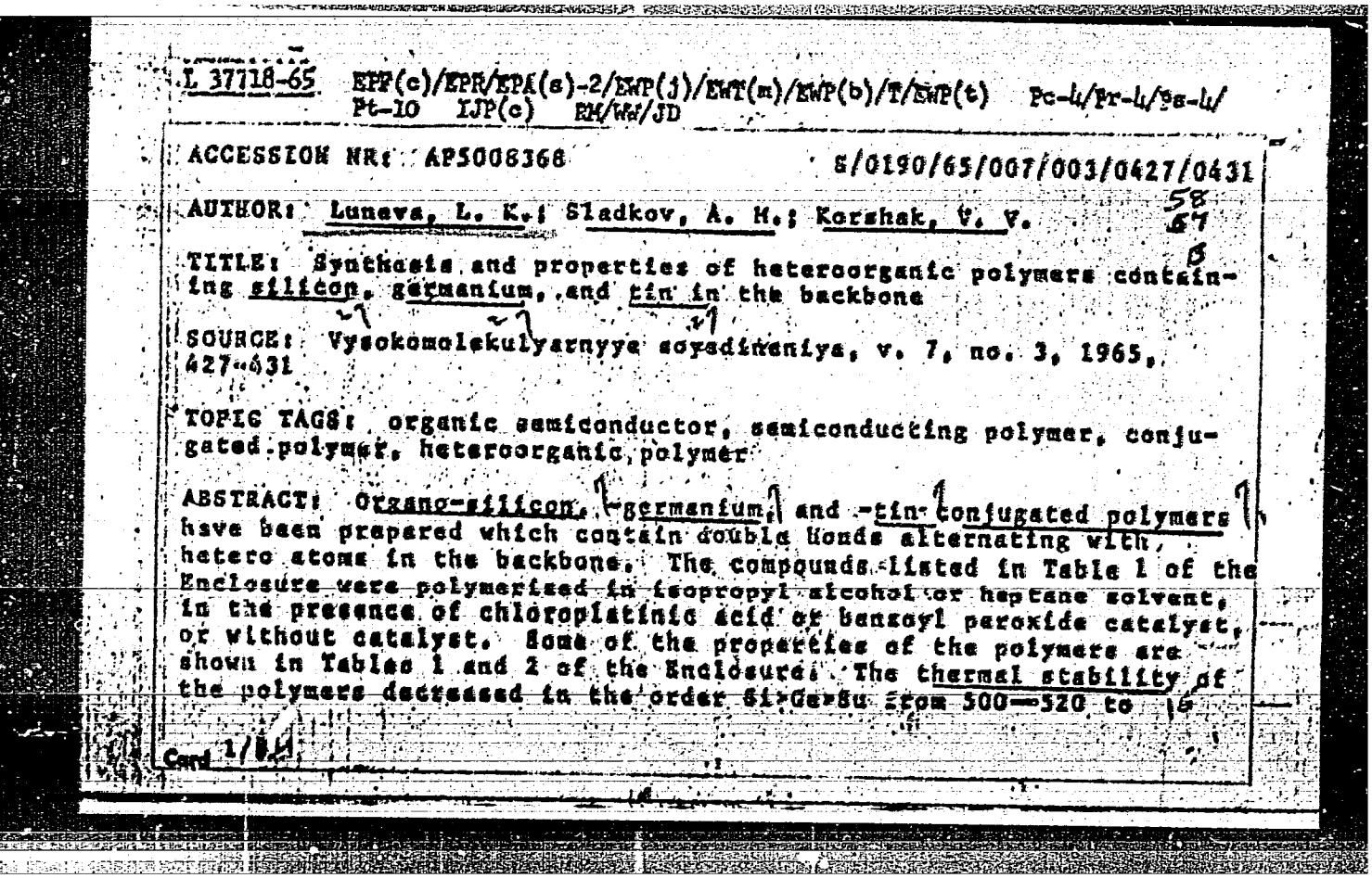
SUB CODE: CH NO REF SOV: 003 OTHER: 000

4/4
Card 4/4
Card 4/3

KORSHAK, V.V.; SRADKOV, A.M.; LUNEVA, L.K.; BULGAKOVA, I.A.

Coodination polymers. Part 16: Synthesis of polymers based on orthotitanates and bis-(β-diketones). Vysokom soed. 5 no.9: 1288-1291 S '63. (MIRA 17:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.



L 37718-65 EPF(c)/EPR/EPA(s)-2/EWP(j)/EWT(m)/EWP(b)/T/EWP(t) Pc-4/Pr-4/Ps-4/
Pt-10 IJP(c) RM/WW/JD

ACCESSION NR: AP5008368 S/0190/65/007/003/0427/0431

AUTHOR: Luneva, L. K.; Sladkov, A. M.; Korshak, V. V. 58 57 B

TITLE: Synthesis and properties of heteroorganic polymers containing silicon, germanium, and tin in the backbone

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 3, 1965, 427-431

TOPIC TAGS: organic semiconductor, semiconducting polymer, conjugated polymer, heteroorganic polymer

ABSTRACT: Organo-silicon, -germanium, and -tin conjugated polymers have been prepared which contain double bonds alternating with hetero atoms in the backbone. The compounds listed in Table 1 of the Enclosure were polymerized in isopropyl alcohol or heptane solvent, in the presence of chloroplatinic acid or benzoyl peroxide catalyst, or without catalyst. Some of the properties of the polymers are shown in Tables 1 and 2 of the Enclosure. The thermal stability of the polymers decreased in the order Si>Ge>Sn from 500—520 to

Card 1/4

L 37718-65

ACCESSION NR: AP5008368

300—350 C (temperatures of maximum volatile loss). Electrical measurements (Table 2 of the Enclosure), thermal stability data, and IR spectroscopy suggest that the d-orbitals of Si, Ge, and Sn participate in the chemical bond formation, so that these hetero atoms do not impair conjugation. Orig. art. has: 3 tables, 1 figure, and 1 formula. [SM]

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Organoelemental Compounds, AN SSSR)

SUBMITTED: 08May64 ENCL: 03 SUB CODE: OC, GC

NO REF SOV: 003 OTHER: 007 ATD PRESS: 3222

Card 2/5

L 30981-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6009159 SOURCE CODE: UR/0079/66/036/003/0553/0556

AUTHOR: Sladkov, A. M.; Luneva, L. K.

ORG: Institute of Organometallic Compounds, Academy of Sciences SSSR (Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR)

TITLE: Synthesis and properties of bis-ethynyl and bis-propargyl compounds of silicon, germanium, and tin

SOURCE: Zhurnal obshchey khimii, v. 36, no. 3, 1966, 553-556

TOPIC TAGS: organosilicon compound, organotin compound, organogermanium compound, IR spectrum

ABSTRACT: The article describes synthesis of the following compounds which have not been previously reported: dimethyldiphenylethynylsilane, ethyltriphenylethynylgermane, diphenyldiethynylsilane, methylphenyldiethynylsilane, p-penhylenebis(dimethylethynyl) disilane, ethylphenyldiethynylgermane, and diphenyldiethynylgermane. The compounds were synthesized by reacting monoethynylmagnesium bromide with dihalo derivaties of the corresponding organometallic compounds. The following propargyl derivatives were prepared: dimethyldipropargylsilane, p-phenylenebis(dimethylpropargyl)disilane, diethyldipropargylgermane, diphenyldipropargylsilane, diphenyldipropargylgermane, and dimethyldipropargylstannane. They were synthesized by reacting propargylmagnesium

UDC: 547.35

Card 1/2

L 30981-66
ACC NR: AP6009159

bromide with dihalo derivatives of organometallic compounds. IR spectra of all the compounds are interpreted. Orig. art. has: 1 figure, 2 tables.

SUB CODE: 07/ SUBM DATE: 08Jul64/ ORIG REF: 005/ OTH REF: 007

Card 2/2

L 13032-66 EWT(m)/EWP(j)/T RM

ACC NR: AP5028581 SOURCE CODE: UR/0076/65/039/011/2695/2700

AUTHOR: Gorshkova, G. N.; Chubarova, M. A.; Sladkov, A. M.; Luneva, L. K.; Kasatochkin, V. I.

ORG: Moscow Institute of Mineral Fuels (Moskovskiy institut goryuchikh iskopayemykh)

TITLE: Spectra of elemental-organic monomers and polymers containing double and triple bonds

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 11, 1965, 2695-2700

TOPIC TAGS: IR spectrum, UV spectrum, polymer, organosilicon compound, organotin compound, organogermanium compound, organomercury compound, organic phosphorus compound

ABSTRACT: IR and UV spectra were studied for monomeric silicon, germanium, mercury and phosphorus organic compounds and the IR spectra of related polymeric silicon, germanium and tin organic compounds with C=C and C≡C bonds. The IR spectra were taken using an IKS-14 spectrophotometer in the 4000-400 cm^{-1} region on specimens in the form of pellets with KBr. The spectra of the three monomers containing phenylethynyl groups displayed C≡C valence vibration band. The position and the in-

UDC: 543.42+547

Card 1/2

L 13032-66

ACC NR: AP5028581

3

tensity of this band was somewhat dependent on the element: dimethyldi-(phenylethynyl)silane at 2159 cm^{-1} was very intense; ethyltri(phenylethynyl)germanium at 2160 cm^{-1} was less intense and di(phenylethynyl) mercury at 2139 cm^{-1} was of medium intensity. In diphenyldiethynyl silane, the C≡C bond occurs in the 2030-2040 cm^{-1} region. This shows the effect of the benzene substituent on the position of the C≡C bond. In the former three compounds the shift of the band toward the higher frequency region is caused by the shift of electrons from the nucleus to the C≡ bond and thus strengthening of the bond. Ultraviolet spectra were measured on an SF-4 instrument using cyclohexane as the solvent. An attempt is made to find the relationship between the position and the intensity of the principal maxima on the molecular structure and the nature of the element. Orig. art. has: 3 figures, 1 table.

SUB CODE: 07,20/ SUBM DATE: 22Jul62/ ORIG REF: 002/ OTH REF: 000

DR

Card 2/2

URUSOV, S.M.; LUNEVA, M.G.: ZNAMENSKIY, A.A., redaktor; OSTRIROV, N.S., tekhnicheskiy redaktor.

[Collection of geometry problems for trade, mining and railroad schools] Sbornik zadach po geometrii; dlia remeslennykh, gorno-promyshlennykh i zheleznodorozhnykh uchilishch. Izd.2-oe, perer. i dop.,oskva, Vses.uchebno-pedagog. iza-vo Trudrezervizdat, 1955. 157 p. (MLRA 9:4)

(Geometry--Problems, exercises, etc.)

LUNEVA, Mariya Zakharovna

[A new type of tomato] Novaia forma pomidora. Moskva, Gos. izd-vo selkhoz lit-ry, 1957. (MIRA 10:11)
(Tomatoes--Varieties)

LUNEVA, Mariya, tkachikha

The price of the night shift. Sov. profsoiuzy 18 no.7:6-8 Ap '62. (MIRA 15:3)

1. Glukhovskiy khlopchatobumazhnyy kombinat imeni V.I.Lenina. (Glukhovo--Cotton manufacture)

LUNEVA, M.Z.

"Ostankinskii 121", a new variety of tomatoes. Biul. Glav. bot. sada no.54:28-31 '64. (MIRA 17:11)

1. Glavnyy botanicheskiy sad AN SSSR.

LYUBIMOVA, V.F., kand. sel'skokhoz. nauk; MAKHALIN, M.A., kand. biolog. nauk; ILINEVA, M.Z., kand. biolog. nauk

Symposium on remote hybridization of plants held in Bulgaria. Vest. AN SSSR 35 no.2:93 F '65. (MIRA 18:3)

L 38390-66 EWP(e)/EWT(m) WH/WW/GD

ACC NR: AT6022665 SOURCE CODE: UR/0000/66/000/000/0210/0217

AUTHOR: Gusev, M. V.; Luneva, O. I.

ORG: none

TITLE: Piezoelectric pressure transducer

SOURCE: AN SSSR. Energeticheskiy institut. Issledovaniya po fizicheskoy gazodinamike (Studies of physical gas dynamics). Moscow, Izd-vo Nauka, 1966, 210-217

TOPIC TAGS: shock tube, shock wave, pressure measurement, reflected shock wave, pressure transducer

ABSTRACT: The design, development, calibration, and performance of a piezoelectric pressure transducer for aerodynamic pressure measurements in shock tubes is described in detail. The sensitive element (diameter—4mm; length—2mm), made of TsTS-19 ceramic, is said to be more sensitive than that made of barium titanate ceramic. The wave guide is made of L-59 brass which has an acoustic resistance close to that of ceramic of the sensitive element. A schematic view of the transducer is given. The resolving time of the transducer is between 0.2 and 0.4 x 10^{-6} sec. The calibration was carried out in argon in a shock tube with incident shock wave Mach numbers up to 9. The pressure behind the incident shock wave was calculated by the equations of conservation of momentum, mass, and energy of the shock wave. A typical calibration curve and typical oscilloscope records of the pressure behind the incident and reflected

Card 1/2

L 38390-66

ACC NR: AT6022666

shock waves are given. A schematic diagram of the shock tube and apparatus is presented. Orig. art. has: 9 figures. [AB]

SUB CODE: 20/ SUBM DATE: 00Feb66/ ORIG REF: 012/ OTH REF: 006/ ATD PRESS: 5043

Card 2/2 mlp

L 12364-65 EWT(1)/EWP(m)/EWG(v)/FCS(k)/EWA(h)/EWA(1) Pd-1/Pe-5/Pi-4
AFTC(a)/AFETR/AEDC(b)/ASD(d)/SSD/ASD(f)-2/ASD(p)-3/AFWL/BSD/AEDC(a)/
SSD(b) MLK

ACCESSION NR: AT4048016 S/0000/64/000/000/0127/0137

AUTHOR: Ionov, V. P.; Nikolayev, G. N.; Gusev, M. V.; Luneva, O. I.

TITLE: Investigation of shock-tube flows using the Tepler method and high-speed photography

SOURCE: AN SSSR. Energeticheskiy institut. Fizicheskaya gazodinamika i svoyst-va gazov pri vy*sokikh temperaturakh (Physical gas dynamics and properties of gases at high temperatures). Moscow, Izd-vo Nauka, 1964, 127-137

TOPIC TAGS: shock tube, shock wave, shock wave reflection, supersonic flow, shock tube flow

ABSTRACT: An experimental study of shock-tube flows using the Tepler method and high-speed photography is presented. Detailed descriptions of the optical apparatus, shock tube, and the experimental procedure are given. The photographic records used to illustrate the various flow patterns and shock wave reflections in the range from Mach 6.7 to 7.2 are presented and discussed. The method is applied to the study of shock wave reflections from a wall with a slit and also to supersonic flow around obstacles of various shapes in oxygen and nitrogen.

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L 12364-65
ACCESSION NR: AT4048016

The results show the existence of a period of quasi-steady flow which follows the formation of the reflected shock wave and the establishment of the flow. The region behind the reflected shock wave seems to be a reservoir of high-temperature gas acquiring a supersonic velocity by flowing through the slit into the expanding channel. Orig. art. has: 8 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 06Mar64	ENCL: 00	SUB CODE: ME
NO REF SOV: 002	OTHER: 001	ATD PRESS: 3125

Card 2/2

LUNEVA, O.I.

Geology of the Imandra-Varsuga formation in the Khibiny Mountain region. Izv.Kar. i Kol'.fil.AN SSSR no.3:15-22 '58. (MIRA 11:12)

1. Geologicheskiy institut Kol'skogo filiala AN SSSR.
(Khibiny Mountains--Geology, Stratigraphic)

LUNEVA, O.I.

AUTHORS: Sidorenko, A. V., Corresponding Member AN USSR 20-1-46/58
Luneva, O. I.

TITLE: On the Sedimentary Textures in the Metamorphic Strata of the Kola Peninsula (O sloistykh teksturakh v metamorficheskikh tolshchakh Kol'skogo poluostrova).

PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 1, pp. 164-166 (USSR)

ABSTRACT: The sedimentary-metamorphic rocks occupy a guiding position in the Precambrian of this peninsula; they constitute 52 to 75%. It is possible to reconstruct the stage of sedimentation of the development of these rocks together with the division of metamorphic suites by the study of their combinations (paragenesis), the primary-sedimentary structures and textures and the original composition. The facial and paleogeographical environment may also be determined in this connection. Everywhere where para-rocks are developed the structure of layers caused by the initial rocks is conserved. Ripple marks, oblique structure of layers and rhythms of sedimentation may be determined in the quartzites of the Imandra-Varzuga suite in the district of the Purnach lake (Monche peninsula). These quartzites together with their cement are described in detail. In spite of a considerable regional metamorphism which converted them to quartzites, sand-

Card 1/3

On the Sedimentary Textures in the Metamorphic Strata of the Kola Peninsula. 20-1-46/58

stones and aleurolits well preserved their original textural peculiarities: a fine, parallel structure of layers, oblique layers, angular unconformity between the layers, ripple marks. The fine layers are due to 3 causes: 1) the difference of mineralogical composition which manifests itself in an alternation of layers of quartz-sandstones and finest admixtures of clayey substance (chlorite, mica minerals) and is emphasized by differences in color; 2) a different mineralogical-cement-composition of every layer; 3) different granulometric composition of individual small layers, finally by the alternation of small layers of finely and medium-grained sandstone.The oblique layers are characteristic of the entire parcel of these quartzites. Two types of stratified structure show themselves: 1) Individual series of oblique layers are either included between parallel series of layers or only separated by thin interruptions which often bear ripple marks (figure 1). 2) The individual series consist of a divergent fan-shaped group of strata (figure 2). Type 1) is supposed to belong to the delta region, type 2) to the coastal region. Signs of landslide of the sediment under water were met with in individual as well horizontal as oblique series (figure 3). Under these series and on them non-dislocated horizontal or oblique series of layers are deposited. The study of the textural peculiarities of quartzites shows that the sediment-

Card 2/3

On the Sedimentary Textures in the Metamorphic Strata of the Kola Peninsula. 20-1-46/58

ation of quartzite-forming deposits took place in the coastal region of the water, namely in the region of those parts of the rivers near the mouth and of the flows near the ground. The clastic material was brought from the north and northeast where probably mainland was. When the water became shallow for short periods of time, an interruption of sedimentation and a washing-out of the already deposited sediments took place. The above-given examples show that a wider use of the lithological methods of investigation in the study of metamorphic rocks is possible. There are 3 figures.

ASSOCIATION: Kola Branch imeni S.M.Kirov AN USSR (Kol'skiy filial im. S. M. Kirova Akademii nauk SSSR).

SUBMITTED: May 3, 1957

AVAILABLE: Library of Congress

Card 3/3

SIDORENKO, Aleksandr Vasil'yevich; LUNEVA, Ol'ga Ivanovna; TOCHILIN, M.S., prof., otv.red.; BUSORGINA, N.I., red.izd-va; ARONS, R.A., tekhn.red.

[Lithologic study of metamorphic formations] K voprosu o litologicheskom izuchenii metamorficheskikh tolshch. Moskva, Izd-vo Akad.nauk SSSR, 1961. 196 p. (MIRA 14:4)
(Petrology)

KUDRYAVTSEV, Ye. V.; CHAKALEV, K. N.; LUNEVA, O. I.

Standards for heat flow measurement. Teplo- i massoper. 1: 140-145 '62. (MIRA 16:1)

1. Energeticheskiy institut im. G. M. Krzhizhanovskogo.

(Calorimetry)

LUNEVA, O.I.

Pre-Cambrian conglomerates of the Kola Peninsula. Dokl. AN SSSR 152 no.4:953-955 O '63. (MIRA 16:11)

1. Geologicheskiy institut AN SSSR. Predstavleno akademikom D.I. Shcherbakovym.

LUNEVA, O.I.

Composition and sources of the clastic materials of conglomerates from Pre-Cambrian metamorphic layers of the Kola Peninsula. Sov.geol. 6 no.12:68-88 D '63. (MIRA 16:12)

1. Geologicheskiy institut AN SSSR.

LUNEVA, O.K.

Mosquito control in pioneer camps. Med. paraz. i paraz. bol. no.2:158-161 Ap-Je '54. (MLRA 7:8)

1. Iz otdela bor'by s malyariyey i gel'mintozami dorozhnoy sanitarno-epidemiologicheskoy stantsii Moskovsko-Kursko-Donbasskoy zheleznoy dorogi (nachal'nik stantsii A.S.Shatilova)

(MOSQUITOES,
*control in labor camps in Russia)
(INDUSTRY AND OCCUPATIONS,
*labor camps, protection from mosquitoes in Russia)

KRUPENIKOV, I.A., otv. red.; DIKUSAR, I.G., red.; ZASLAVSKIY, M.N., red.; LUNEVA, R.I., red.; URSU, A.F., red.; KHARITONINA, A.A., red.; POLONSKIY, S.A., tekhn. red.

[Transactions of the Dokuchaev Conference, commemorating the 60th anniversary of the publication of V.V.Dokuchaev's work "Problems of the soils of Bessarabia."] Trudy Dokuchaevskoy konferentsii posviashchennoi 60-letiiu vykhoda v svet raboty V.V.Dokuchaeva "K voprosu o pochvakh Bessarabii," 1960. Kishinev, Izd-vo "Shtiintsa, 1961. 222 p. (MIRA 15:7)

1. Dokuchayevskaya konferentsiya, posvyashchennaya 60-letiyu vykhoda v svet raboty V.V.Dokuchayeva "K voprosu o pochvakh Bessarabii",1960. 2. Pochvennyy institut imeni N.A.Dimo , Moldaviya (for Krupenikov, Zaslavskiy, Luneva, Ursu).
(Moldavia--Soils)

POROZOV, V.K., inzhener; LUNEVA, S.S., inzhener.

Lupine and its role in city landscaping. Gor.khoz. Mosk. 27 no.5:27-30 My '53. (MLRA 6:6)
(Lupine) (Landscape gardening)

LUNEVA, V. S.

"Determination of the Concentration fo Hydrogen Tons in Lubricating Greases by the Potentiometric Method", p 126, in the Monograph "Investigation and Use of Petroleum Products", edited by N. G. Fuchkov, Gostoptekhizdat, Moscow-Leningrad, 1950.

LUNEVA, V.S.

KLOCHKO, M.A.; LUNEVA, V.S.

Chemical and electrochemical dissolving of palladium in solutions of certain acids and salts. Izv.Sekt.plat.i blag.met. no.27:239-244 '52. (MLRA 7:5)

(Palladium) (Solubility)

LUNEVA, V.S

Study and Use of Petroleum Products, Moscow, Gostoptekhizdat, 1957, 213pp.

Luneva, V.S., and Kovalev, V.A. Quick Method for Determining the Protective Capacity of Concistent Lubricants 219

This article outlines methods for and gives results of evaluating the protective effectiveness of lubricants against corrosion in both liquid and gaseous media. Petrolatum, gun lubricant and commercial vaseline were the more resistant to gaseous corrosion, while corrosion was best controlled in liquid media according to GOST 5757-51, which is based on measuring the width of the protective coating of oil deposited on metal surfaces at various temperatures, and several other factors. There are 4 figures, 7 tables and 14 Soviet references.

AVAILABLE: Library of Congress

TM/ksv
1-23-59

Card 17/17 This collection of articles gives results of scientific res. work of Vsesoyuznyy nauchno-issledovatel'skiy inst. po pererabotke nefti i gaza i poluchaniyu iskusstvennogo zhidkogo topliva (AU Sci Res Inst for Processing of petroleum and Gas for the Prduction of Synthetic Liquid Fuel)

KAULINA, M. M., and LUNEVA, V. S.

"Evaluation of the Viscosity Properties of Consistent Lubricants at Low Temperatures by Using Rotary and Capillary Viscometers." pp199.

in book Study and Use of Petroleum Products, Moscow, Gosteptekhizdat, 1957, 213 pp.

THis collection of articles gives the results of the sci. res. work of the AU Sci. Res. Inst. for;the Processing of Petroleum and Gas for the Production of Synthetic Liquid Fuel.

LUNEVA, V.S.

KAULINA, M.M.; LUNEVA, V.S.

Evaluating viscous properties of greases at low temperatures by the rotary and capillary meters. Trudy VNII NP no.6:199-205 '57. (MIRA 10:10)

(Viscosity) (Lubrication and lubricants)

LUNEVA, V.S.; KOVALEV, V.A.

Rapid method for determining protective properties of greases.
Trudy VNII NP no.6:219-232 '57. (MIRA 10:10)
(Lubrication and lubricants) (Corrosion and anticorrosives)

LUNEVA, V.S.; ALESHECHKINA, N.V.; ANDREYEVA, A.V.

Quantitative evaluation of the protective capacity of greases by means of the polarographic method. Trudy VNII NP no.7:449-459 '58. (MIRA 12:10)
(Lubrication and lubricants--Testing)
(Corrosion and anticorrosives) (Polarography)

LUNEVA, V.S.; NIKOLAYEVA, I.N.

Potentiometric method of determining the free acid and alkali content of lubricating greases. Trudy VNII NP no.7:459-469 '58. (MIRA 12:10)
(Lubrication and lubricants) (Potentiometric analysis)

S/065/60/000/009/006/006/XX
E194/E184

AUTHORS: Kuznetsov, A.A., and Luneva, V.S.

TITLE: Quantitative Determination of the Anti-corrosive Properties of Greases by the Radioactive Indicator Method

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1960, No. 9, pp. 61-64

TEXT: Existing standard methods of assessing the protective properties of greases and their corrosive effects are qualitative and as quantitative results were required it was decided to use the radioactive indicator method. The test pieces were discs of area 21.3 cm^2 containing the isotope Fe^{59}. The metal surfaces were cleaned with particular care. The protection tests were made at relative humidity of 98-100% at various temperatures: the test results are plotted and are given in Table 1. It is seen that increasing the test temperature increases the rate of metal transfer with both hydrocarbon and soap greases. The repeatability of metal content determinations in the lubricants in assessing the protective properties lies in the range 4-16%. Under isothermal

Card 1/2

S/065/60/000/009/006/006/XX
E194/E184

Quantitative Determination of the Anti-corrosive Properties of Greases by the Radioactive Indicator Method

conditions the relative humidity plays a prominent role and corrosion is very slight at low relative humidity. The radioactive tracer and polarographic methods of assessing metal transfer were compared; the results were in general agreement but as will be seen from the data given in Table 2, the radioactive determinations are the more accurate. Moreover, the radioactive method permits recording of the initial kinetics of the corrosion process in a time not only less than a day but even less than an hour. The time required for a radioactive determination is less than that of polarographic determination by a factor of 3 or 4. Preliminary results of tests of the corrosive effects of various greases by the radioactive method are given in Table 3: there was no transfer of metal to the lubricants in periods up to 24 hours, but transfer was observed at 48 hours and above. The greases are readily compared with one another. There are 1 figure, 3 tables and 10 references: (Soviet, but one probably translated from English).

ASSOCIATION: VNII NP

Card 2/2

LUNEVA, V.S.; DRUZHININA, A.V.; [illegible] uchastiye BURDENYUK, L.N., starshiy laborant

Using the potentiometric method in investigating the acid-base properties of impurities and lubricants. Neftepер. i neftekhim. no.12:11-13 '63. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti.

L 37714-65 EWT(m)/EPF(c)/T Pr-4 DJ

ACCESSION NR: AP5001490 S/0065/64/000/012/0056/0061

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AUTHOR: Luneva, V. S.

TITLE: Methods for the evaluation of the acid-base properties of oils with additives

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 12, 1964, 56-61

TOPIC TAGS: acidity, alkalinity, potentiometric titration, oil additive, lubrication oil, pH

ABSTRACT: Modern motor oils contain additives which possess multifunctional properties. Indicator methods are not always capable of determining properly and differentiating these properties in fresh as well as in used oils. For this purpose it is worth while to utilize potentiometric analysis. It was shown that in potentiometric titration the complete decomposition of the majority of additives by acid occurs in the pH=2 region and decomposition by alkali occurs at about pH=10. Potentiometric titration gives the correct evaluation of the acid-base properties of oil additives, which has been verified by comparing the results with the calculated data. In addition to the acid-base properties this method is recommended for

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ACCESSION NR: AP5001470

the determination of durability of additives and in combination with other indices for determining the oil change periods. Orig. art. has: 5 tables and 3 figures

ASSOCIATION: VNII NP

SUBMITTED: 00 ENCL: 00 SUB CODE: FP

NR REF SOV: 012 OTHER: 005

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LUNEVA, V.S.

Concerning the methods for evaluating the acid-base properties of lubricants with additives. Khim. i tekh. topl. i masel 9 no.12:56-61 D '64. (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.

LUNEVA, Z.S., inzhener.

The ordinary lilac and its use in landscape gardening. Gor.khoz.Mosk. 27 no.7:17-18 Jl '53. (MLRA 6:7)
(Moscow--Landscape gardening) (Landscape gardening--Moscow) (Lilacs)

LUNEVA,Z.S., inzhener-dendrolog

Shaping the tops of young trees in nurseries. Gor.khoz.Mosk.29 no.9:20-29 S '55. (MLRA 8:12)
(Trees)

LUNEVA, Z.S.

LUNEVA, Z.S., kand. sel'skokhozyaystvennykh nauk.

Using decorative shrubs in city landscaping. Gor. khoz. Mosk. 32 no.2:24-26 F '58. (MIRA 11:1)
(Moscow--Landscape gardening)

LUNEVA, Z.S.

KORZHEV, M.P., arkhitektor; LUNEVA, Z.S., inzhener zelenogo stroitel'stva.

Gardens and parks in Rumania. Gor. khoz. Mosk. 32 no.3:38-40 Mr '58.
(Rumania--Landscape architecture) (MIRA 11:3)
(Rumania--Landscape gardening)

VINOGRADOV, K.A.; ZEMLYANITSKIY, L.T.; NOVOZHILOVA, V.A.[deceased]; LUNEVA, Z.S.; VAKULENKO, V.V.; GALAKTIONOV, I.I.; ALEKSEYENKO, L.V.; NERONOVA, M.D., red.; KHENOKH, F.M., tekhn. red.

[Care of urban plantings] Ukhod za gorodskimi nasazhdeniiami. Moskva, Izd-vo Kommun. khoz. RSFSR, 1963. 89 p. (MIRA 16:7)

1. Akademiya kommunal'nogo khozyaystva.
(Landscape gardening)

LUNEVA, Z.S., kand. sel'khoz. nauk; SUDAKOVA, Ye.A., ml. nauchn. sotr.; POPOV, V.A., st. nauchn. sotr.

[Growing ornamental tree and shrub seedings; for town landscaping in the central zone of the European Part of the R.S.F.S.R.] Vyrashchivanie sazhentsev dekorativnykh derev'ev i kustarnikov; dlia ozeleneniia gorodov srednei polosy Evropeiskoi chasti RSFSR. Moskva, Stroiizdat, 1965. 170 p. (MIRA 18:8)

1. Sektor ozeleneniya gorodov Akademii kommunal'nogo khozyaystva im. K.D.Pamfilova (for Luneva, Sudakova).

AUTHOR: Luneva, Z.S. 129-4-14/17

TITLE: Heat treatment in a steam atmosphere (Termicheskaya obrabotka v atmosfere para)

PERIODICAL: "Metallovedenie i Obrabotka Metallov" (Metallurgy and Metal Treatment) 1957, No. 4, pp. 54 - 56 (U.S.S.R.)

ABSTRACT: Combined abstract of a number of papers relating to the method developed in America of heat treating components and tools in an atmosphere containing hot steam.

There are 7 references, 2 of which are Slavic, but relating to non-Slavic work.

AVAILABLE:

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LUNEVA, Z. S.

129-1-5/14

AUTHORS: Garashchenko, A.P., Candidate of Technical Sciences, Gulyaev, A.P., Doctor of Technical Sciences, Professor, and Luneva, Z.S., Engineer.

TITLE: Molten Metals and Alloys as a Medium for Heating Steel Components during Heat Treatment (Rasplavlennyye metally i splavy kak sreda dlya nagreva stal'nykh izdeliy pri termicheskoy obrabotke)

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, No.1, pp. 21 - 26 (USSR).

ABSTRACT: Local heating is usually effected in lead baths. In view of the danger to the operating personnel and also the scarcity of lead, attempts are being made to substitute this material by others. As a result of the experiments, it was established that aluminium alloys containing 8 to 12% Si can be used for heating steel components to be tempered and that aluminium alloys containing 6 - 10% Si and 5 - 7% Fe can be used for heating steel components to be hardened. As regards speed of heating, the here mentioned alloys are equivalent to molten lead. Measures were developed for protecting the crucibles, the thermocouple casing and the components against erosion and also against increased loss of the alloy when removing the components. For heating components to 700 - 850 °C, the

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Molten Metals and Alloys as a Medium for Heating Steel Components during Heat Treatment.

best protection against sticking of aluminium during immersion is coating with dry chalk; the loss in weight in this case will amount to 1 to 3 g/m^2 and the loss in dimension will amount to 0.02 - 0.045 mm. The protective lining of the crucibles consists of 60% ground chamotte, 35% fire-resistant clay and 2 - 5% borax to which 10 to 15% in weight of the entire mass is added of a mixture of 50% water and 50% liquid glass. The thermocouple casing and laboratory crucibles are protected by a chalk paint consisting of 62% molten chalk, 8% liquid glass and 30% water.
There are 3 figures and 4 tables.

ASSOCIATION: All-Union Tool Scientific Research Institute (Vsesoyuznyy nauchno-issledovatel'skiy Instrumental' nyy Institut)

AVAILABLE: Library of Congress.

SOV/129-58-11-7/13

AUTHORS: Gulyayev, A. P., Doctor of Technical Sciences, Professor, Luneva, Z.S., Korolev, G. G. and Samoylov, V.V., Engineers

TITLE: Heat Treatment of Tools Made of High Speed Steel in a Steam Atmosphere (Termicheskaya obrabotka instrumentov iz bystrorezhushchey stali v atmosfere para)

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, Nr 11, pp 39-44 (USSR)

ABSTRACT: According to data of various authors, the service life of tools made of high speed steel is increased by 50 to 100% if they are heat treated in steam after being finish—machined and ground. In order to establish the effectiveness of such heat treatment, the authors carried out experiments with specimens and drills made of the steels R9 and R18 which, prior to treatment with steam, were hardened, tempered, sharpened and ground. The treatment with steam was effected in a hermetically closed electric furnace, a sketch of which is shown in Fig.2, in which the temperature was maintained automatically within $\pm$ 5°C. The steam pressure was maintained at 0.1-0.2 atm. To prevent the formation of Fe_2O_3 on the machined surfaces, the steam has to be introduced in the super-heated state.

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Only then will a film form consisting of magnetic iron oxides which is the reason for the high corrosion stability and the good appearance of the thus treated tools. The treatment procedure is graphed in Fig.1. Prior to introducing steam, the temperature is raised to 350-370°C and the tools are held at that temperature for 20 to 30 mins. Then, steam is introduced and the temperature is maintained at the same level for a further 30 mins. Following that, the temperature is raised to 540-550°C, maintained constant at that temperature for 30-60 mins and, finally, cooled in air and quenched in oil. The graph, Fig.3, shows the measured thickness of the oxide film on the steel R9 treated in a steam atmosphere at various temperatures with a holding time of 30 mins; in Fig.4 the thickness is graphed of the oxide film on the steel R9 treated in a steam atmosphere at 550°C as a function of the holding time. It was found that the oxide film produced by steaming is considerably denser than that produced by

 alkali oxidation. The corrosion stability and the

Heat Treatment of Tools Made of High Speed Steel in a Steam Atmosphere

resistance to seizure was also measured as well as the service life. On the basis of the obtained results a heat treatment regime in a steam atmosphere was developed for tools made of high speed steels. The steam treatment is recommended as an additional treatment of sharpened and ground tools for the purpose of improving their resistance to corrosion and their cutting performance. Steam is also recommended as an atmosphere in the furnace during tempering for the purpose of preventing erosion of the tool surface; in this case no inter-cycle chemical treatment is necessary. After steam treatment at 500 to 600°C a dense film of the magnetic oxide Fe_3O_4 forms, the thickness of which is 1-4μ. The presence on the surface of such a film leads to an increase of the adhesion temperature (build up of machined metal onto the high speed steel) by 100-150°C and this explains the improved cutting properties; furthermore, steam treatment does not bring about a drop in the surface quality during heating in saltpetre and in air, which is also important from the

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point of view of improving the service life of the tool. Steam treatment is at present applied by numerous Works and should be used on a larger scale.
There are 9 figures, 1 table and 4 references, 3 of which are English, 1 French.

ASSOCIATIONS: VNII, Zavod "Frezer" ("Frezer" Works) and ZIL

1. Tools--Heat treatment 2. Tool steel--Properties
3. Steam--Metallurgical effects

Card 4/4

MALININA, K.A.; SMOL'NIKOV, Ye.A.; SUYETOV, A.P.; BADAYEVA, A.A.; LUNEVA, Z.S.; KUKOLEV, V.V.; SOKOLOVSKAYA, V.V.; LEBEDEVA, Ye.A.; UVAROVA, A.F., tekhn.red.

[Technological operations in the manufacture of metal-cutting tools; instructions] Tekhnologiia izgotovleniia metallorezhushchikh instrumentov; rukovodiashchie materialy. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit.lit-ry. No.7. [Heat treatment] Termicheskaia obrabotka. 1960. 127 p. (MIRA 13:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut. 2. Termicheskaya laboratoriya Vsesoyuznogo nauchno-issledovatel'skogo instrumental'nogo instituta (for all, except Uvarova).
(Metal-cutting tools) (Metals--Heat treatment)

PODGURSKIY, G.V.; PODOSENOVA, N.A.; ROSLAVLEV, V.G.; MIRINA, L.G.; GARASHCHENKO, A.P.; LUNEVA, Z.S.; PETROSYAN, L.K.; DEGTYARENKO, N.S., kand. tekhn. nauk, red.; LESNICHENKO, I.I., red. izd-va; GORDEYEVA, L.P., tekhn. red.

[Technological processes for manufacturing taps of high-speed steel] Tekhnologiia izgotovleniia metchikov iz bystrorezhushchei stali. Pod red. N.S.Degtiarenko. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 41 p. (MIRA 14:9)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut.
(Taps and dies) (Metalwork)

PODGURSKIY, G.V.; PODOSENOVA, N.A.; ROSLAVLEV, V.G.; MIRINA, L.G.; BUDNIKOV, N.Ye.; GARASHCHENKO, A.P.; LUNEVA, Z.S.; PETROSYAN, L.K.; GAMOVA, L.S.; DEGTYARENKO, N.S., kand. tekhn. nauk, red.; LESNICHENKO, I.I., red. izd-va; CHERNOVA, Z.I., tekhn. red.

[Technological processes in manufacturing metal-cutting tools] Tekhnologiia izgotovleniia reztsov. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 79 p. (MIRA 14:10)
(Metal-cutting tools)